

WHAT IS CLAIMED IS:

1. An information processing apparatus capable of acquiring various status information of plural peripheral apparatus on a network, comprising:

5 communication means for executing a communication protocol for acquiring the status information;

designation means for designating status information to be acquired for each of various phenomena;

10 acquisition means for acquiring the status information by said communication means from the supply source of the status information designated by said designation means;

15 memory means for memorizing a parameter for executing said communication protocol for each phenomenon that can be designated by said designation means;

20 link means for linking, by the unit of a predetermined group, parameters respectively corresponding to the objects and memorized by said memory means;

25 alteration means for altering the value of the parameter memorized by said memory means; and

control means adapted, in case the value of the parameter is altered by said alteration means, to alter the value of a parameter linked with the altered

parameter according to the content of such alteration.

2. An information processing apparatus according to claim 1, wherein said parameter includes a time-out 5 time in said communication protocol and a settable range for said time-out time; and

10 said control means is adapted to judge the load on said network based on the content of alteration by said alteration means and to increase or decrease the value of said time-out time or said 15 settable range.

3. An information processing apparatus according to claim 1, wherein the linking by said link means is 15 executed in the unit of a group based on the kind of the peripheral apparatus.

4. An information processing apparatus according to claim 3, wherein said group includes a group of 20 printers and/or a group of scanners and/or a group of modems.

25 5. An information processing apparatus according to claim 1, also preferably the linking by the link means is executed in the unit of a group based on the kind of connection between the self apparatus and the peripheral apparatus.

6. An information processing apparatus according to claim 5, also preferably the above-mentioned group includes a network connection group in which the self apparatus and the peripheral apparatus are connected through the network, and a local connection group in which the self apparatus and the peripheral apparatus are connected directly.

7. An information processing apparatus according to claim 6, also preferably the above-mentioned network connection group includes a first group in which the peripheral apparatus is directly connected to the network and a second group in which the peripheral apparatus is connected through a gateway device to the through a gateway device to said network.

8. An information processing method for acquiring various status information of plural peripheral apparatus on a network, comprising:

20 a communication step of executing a communication protocol for acquiring the status information;

25 a designation step of designating status information to be acquired for each of various phenomena;

an acquisition step of acquiring the status

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information by said communication step from the supply source of the status information designated by said designation step;

5 an alteration step of altering the value of a parameter for executing said communication protocol, memorized by a memory for each phenomenon that can be designated in said designation step; and

10 a control step adapted, in case the value of the parameter is altered by said alteration step, to alter the value of a parameter in said memory, linked with said altered parameter according to the content of said alteration.

9. An information processing method according to 15 claim 8, wherein said parameter includes a time-out time in said communication protocol and a settable range for said time-out time; and

20 said control step is adapted to judge the load on said network based on the content of alteration by said alteration step and to increase or decrease the value of said time-out time or said settable range according to said judgement.

10. An information processing method according 25 to claim 8, wherein the linking is executed in the unit of a group based on the kind of the peripheral apparatus.

11. An information processing method according to claim 10, wherein said group includes a group of printers and/or a group of scanners and/or a group of modems.

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12. An information processing method according to claim 8, wherein said linking is executed in the unit of a group based on the kind of connection between the self apparatus and the peripheral apparatus.

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13. An information processing method according to claim 12, wherein said group includes a network connection group in which the self apparatus and the peripheral apparatus are connected through said network, and a local connection group in which the self apparatus and the peripheral apparatus are connected directly.

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14. An information processing method according to claim 13, wherein said network connection group further includes a first group in which the peripheral apparatus is directly connected to said network and a second group in which the peripheral apparatus is connected through a gateway device to said network.

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15. A computer readable memory storing a

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computer program to be executed in an information processing apparatus for acquiring various status information of plural peripheral apparatus on a network, said computer program comprising:

5                   a communication step of executing a communication protocol for acquiring the status information;

                      a designation step of designating status information to be acquired for each of various phenomena;

10                  an acquisition step of acquiring the status information by said communication step from the supply source of the status information designated by said designation step;

15                  an alteration step of altering the value of a parameter for executing said communication protocol, memorized by a memory for each phenomenon that can be designated in said designation step; and

20                  a control step adapted, in case the value of the parameter is altered by said alteration step, to alter the value of a parameter in said memory, linked with said altered parameter according to the content of said alteration.

25                  16. A computer readable memory according to claim 15, wherein said parameter includes a time-out time in said communication protocol and a settable

range for said time-out time; and

5           said control step is adapted to judge the  
load on said network based on the content of  
alteration by said alteration step and to increase or  
decrease the value of said time-out time or said  
settable range according to said judgment.

10           17. A computer readable memory according to  
claim 15, wherein the linking is executed in the unit  
of a group based on the kind of the peripheral  
apparatus.

15           18. A computer readable memory according to  
claim 17, wherein said group includes a group of  
printers and/or a group of scanners and/or a group of  
modems.

20           19. A computer readable memory according to  
claim 15, wherein said linking is executed in the unit  
of a group based on the kind of connection between the  
self apparatus and the peripheral apparatus.

25           20. A computer readable memory according to  
claim 19, wherein said group includes a network  
connection group in which the self apparatus and the  
peripheral apparatus are connected through said  
network, and a local connection group in which the

self apparatus and the peripheral apparatus are connected directly.

21. A computer readable memory according to  
5 claim 20, wherein said network connection group further includes a first group in which the peripheral apparatus is directly connected to said network and a second group in which the peripheral apparatus is connected through a gateway device to said network.

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22. An information processing apparatus comprising:

communication means for executing communication based on a predetermined protocol for transmitting, to a peripheral apparatus on a network, 15 request data for acquiring information held or generated by said peripheral apparatus and for receiving response data to said request data; activation means for designating a peripheral apparatus on said network and information to be acquired from said peripheral apparatus, and activating communication by said communication means for acquiring said designated information from said designated peripheral apparatus;

20 25 memory means for memorizing a parameter in said communication protocol for each category, said parameter being a number of retries of said request

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data or a time-out value for the reception of said response data; and

control means for reading, from said memory means, the parameter of a category according to the 5 type of the peripheral apparatus designated by said activation means or the information designated by said activation means, and using such parameter in the communication activated by said activation means.

10 23. An information processing apparatus according to claim 22, wherein said communication protocol is HTTP.

15 24. An information processing apparatus according to claim 22, wherein said control means determines the category of the parameter to be read from said memory means, based on the kind of service which the peripheral apparatus provides to said information processing apparatus.

20 25. An information processing apparatus according to claim 22, wherein said control means determines the category of the parameter to be read from said memory means, based on whether the 25 information designated by said activation means is image data or not.

STATEMENT OF GOVERNMENT INTEREST

26. An information processing apparatus according to claim 22, further comprising:

discrimination means for discriminating the attribute of the network to be used for access to the 5 peripheral apparatus designated by said activation means;

wherein said control means determines the category of the parameter to be read from said memory means, based on the result of said discrimination.

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27. An information processing apparatus according to claim 26, wherein said discrimination means discriminates whether a dial-up connection channel is used for access to the peripheral apparatus 15 designated by said activation means.

28. An information processing method comprising:

a communication step of executing communication based on a predetermined protocol for 20 transmitting, to a peripheral apparatus on a network, request data for acquiring information held or generated by said peripheral apparatus and for receiving response data to said request data;

an activation step of designating a 25 peripheral apparatus on said network and information to be acquired from said peripheral apparatus, and activating said communication step for acquiring said

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designated information from said designated peripheral apparatus;

5 a readout step of reading a parameter in said communication protocol from memory means storing said parameter for each category, said parameter being a number of retries of said request data or a time-out value for the reception of said response data; and

10 a control step of reading, by said readout step, the parameter of a category according to the type of the peripheral apparatus designated by said activation step or the information designated by said activation step, and using such parameter in the communication activated by said activation step.

15 29. An information processing method according to claim 28, wherein said communication protocol is HTTP.

20 30. An information processing method according to claim 28, wherein said control step determines the category of the parameter to be read from said memory means, based on the kind of service which the peripheral apparatus provides to said information processing apparatus.

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31. An information processing method according to claim 28, wherein said control step determines the

category of the parameter to be read from said memory means, based on whether the information designated by said activation step is image data or not.

5           32. An information processing method according to claim 28, further comprising:

              a discrimination step of discriminating the attribute of the network to be used for access to the peripheral apparatus designated by said activation step;

10           wherein said control step determines the category of the parameter to be read from said memory means, based on the result of said discrimination.

15           33. An information processing method according to claim 32, wherein said discrimination step discriminates whether a dial-up connection channel is used for access to the peripheral apparatus designated by said activation step.

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              34. A computer readable memory storing a computer program to be executed in an information processing apparatus, said computer program comprising:

25           a communication step of executing communication based on a predetermined protocol for transmitting, to a peripheral apparatus on a network,

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request data for acquiring information held or generated by said peripheral apparatus and for receiving response data to said request data;

an activation step of designating a

5 peripheral apparatus on said network and information to be acquired from said peripheral apparatus, and activating said communication step for acquiring said designated information from said designated peripheral apparatus;

10 a readout step of reading a parameter in said communication protocol from memory means storing said parameter for each category, said parameter being a number of retries of said request data or a time-out value for the reception of said response data; and

15 a control step of reading, by said readout step, the parameter of a category according to the type of the peripheral apparatus designated by said activation step or the information designated by said activation step, and using such parameter in the

20 communication activated by said activation step.